

Pfeiffer, Jane K - DNR

From: Pfeiffer, Jane K - DNR
Sent: Wednesday, August 25, 2021 12:22 PM
To: Robert Reineke
Subject: RE: BRRTS Activity 02-41-587376 (Community Within the Corridor - West Block) - Vapor Barrier Documentation

Hi Robert,

Thank you for your email. Smoke testing is not specifically required, however, it may be a useful tool which K. Singh should consider and implement if it appears to be appropriate for the commissioning of the system. Regarding a standard for smoke testing, I understand that this testing methods relies on visual observations to determine the results of the test. Therefore, I am not aware of any specific standards that you must reference.

As you move forward with commissioning the system, please keep the following in mind in reference to the guidance presented in Appendix D of DNR guidance document RR-800:

- The guidelines are only recommendations for how to demonstrate interruption of the vapor pathway.
- There is flexibility in the parameters and criteria selected to verify performance of a mitigation system.
- Site-specific performance verification plans should be prepared with a goal to demonstrate that system meets or exceeds all design criteria (Wis. Admin. Code § NR 724.15(2)). The plan should identify the design criteria, performance verification parameters, and the technical rational for using these parameters (Wis. Admin § NR 724.11(7))

Best,

Jane

From: Robert Reineke <rreineke@ksinghengineering.com>
Sent: Friday, August 20, 2021 3:39 PM
To: Pfeiffer, Jane K - DNR <jane.pfeiffer@wisconsin.gov>
Subject: BRRTS Activity 02-41-587376 (Community Within the Corridor - West Block) - Vapor Barrier Documentation

Jane,

We will be installing a vapor barrier next week above the excavated hot spot on the west block.

The selected vapor barrier has a permeance rating of 1.5×10^{-9} m/s for PCE and 2.4×10^{-9} m/s for TCE.

We will be installing the vapor barrier in accordance with manufacturer's recommendations.

Smoke testing is mentioned for submembrane depressurization commissioning, albeit this is mostly a sub-slab project and the vapor membrane does not cover the entire floor area. Can the WDNR provide some guidance on whether smoke testing is required for documenting the installation and what standard is required other than checking seams for leaks?

Robert T. Reineke, P.E.

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